

**A NEW FRESHWATER BIVALVE FROM THE TRIASSIC OF SOUTHEASTERN QUEENSLAND.** *Memoirs of the Queensland Museum* 37 (1): 146, 1994:- Collections made from the Blackstone Formation, Ipswich Coal Measures, have yielded, *Protovirgus clellandi* sp. nov. in addition to bivalves reported by Etheridge (1892), McMichael (1957), and Hill et al. (1965). *P. clellandi* sp. nov. is also reported from the Tingalpa Formation. A Late Triassic (Carnian) age has been ascribed to the Blackstone Formation by de Jersey (1975), and the Tingalpa Formation (de Jersey & Hamilton, 1965).

Class BIVALVIA Linne, 1758

Order UNIOIDA Stoliczka, 1871

Family UNIONIDAE Fleming, 1828

*Protovirgus* McMichael, 1956

*Protovirgus clellandi* sp. nov.

**Material.** Holotype: QMF29473, from mullock heaps at Ebbw Vale, which are derived from the Blackstone Formation, Claypave Quarry, Dinmore. Paratypes: QMF29475, QMF32226, same data as holotype; QMF27523, from road cutting on Gateway Arterial road, Brisbane, Tingalpa Formation.

**Diagnosis.** Medium sized, equivalved, elongate unioid with inflated umbonal area and fine comarginal ornament. Hinge straight and long. Tapering strongly to the posterior. Ventral margin is sharp. Dentition unknown. Anterior adductor scars are raised on platforms near the umbones.

**Description.** Maximum height ranges from 28-39mm, width 27-36mm and in length 75-123mm (Table 1). Height and width is approximately equal along the shell length. Hinge straight, the ligament is apparently wide and extends approximately 2/3 of the shell length. Umbones anterior, placed at no more than 1/6 of shell length. Strongly tapering posteriorly, shell is apparently thin with ornament of fine growth lines. Rounded at posterior margin. Anterior adductor scar just ventral of umbo consists of slightly raised platform with 3 or 4 small slightly ovate pits. Posterior muscle scar unknown. Dentition unknown.

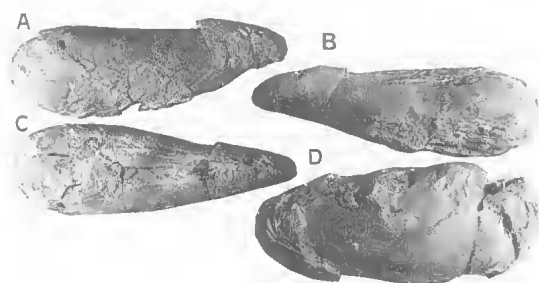


FIG. 1. *Protovirgus clellandi* sp. nov. A-C, QMF29473, x0.3. A, left valve; B, right valve; C, dorsal view. D, paratype, QMF29475, right valve x0.5.

TABLE 1. Morphometric data for specimens of *Protovirgus clellandi* sp. nov. from the Blackstone and Tingalpa Formations. Measurements in mm.

Specimen	Height	Length	Width
QMF29473	39	123	36
QMF29475	31	75	27

**Remarks.** The tapering form, rounded posterior end, sharp ventral margin and strongly anterior umbones ally the present material with *Protovirgus* McMichael, 1956. The type species, *P. dunstani* (Etheridge Jr., 1888 described by McMichael 1956: 232, fig. 8) from the Triassic of New South Wales is much smaller and less robust than *P. clellandi*. *P. flemingi* McMichael (1956: 232-233, figs 1-3) from Cretaceous of New Zealand is also smaller and the umbones are less anteriorly placed. *P. jaenschi* Ludbrook, 1961 from Triassic strata at Leigh Creek, South Australia has a greater height to length ratio, and is more gently tapering than *P. clellandi*. *P. coatsi* Ludbrook, 1961 is smaller and does not taper as strongly as *P. clellandi*, resulting in a far more ovate outline.

**Etyymology.** For John Clelland Hocknull.

#### Acknowledgements

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- Scott A. Hocknull, Queensland Museum PO Box 3300, South Brisbane, Queensland 4101, Australia; 10 August 1994.